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07-612,956 11/12/90 LUND A 90,380

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2302

08/12/92

☒ This application has been examined ☐ Responsive to communication filed on \_\_\_\_\_ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire -3- month(s), 0 days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |                                                                                         |                                                                                 |
|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input checked="" type="checkbox"/> Notice re Patent Drawing, PTO-948.       |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.                 | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.     | 6. <input type="checkbox"/> _____                                               |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-20 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-20 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☒ Other - See attached.

EXAMINER'S ACTION

Serial Number: 612956  
Art Unit : 2302

15. Claims 1-20 are presented for examination.

16. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

17. The following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use.

#### Arrangement of the Specification

The following order or arrangement is preferred in framing the specification and, except for the title of the invention, each of the lettered items should be preceded by the headings indicated below.

- (a) Title of the Invention.
  - (b) Cross-References to Related Applications (if any).
  - (c) Statement as to rights to inventions made under Federally-sponsored research and development (if any).
  - (d) Background of the invention.
    - 1. Field of the Invention.
    - 2. Description of the Related Art including information disclosed under 37 CFR 1.97-1.99.
  - (e) Summary of the Invention.
  - (f) Brief Description of the Drawing(s).
  - (g) Description of the Preferred Embodiment(s).
  - (h) Claim(s).
  - (i) Abstract of the Disclosure.
18. Specifically, the first page of the textual portion of the specification with respect to 17 (b) supra needs to be updated. Also the section titled as "Background of Invention" should be moved above "Field of the Invention", and the title "Object of the Invention" should be deleted.

19. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Serial Number: 612956  
Art Unit : 2302

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

20. Claims 1-20 are rejected under 35 U.S.C. 103 as being unpatentable over Paulsen et al. in view of Smith.

21. Starting with claim 12, Paulsen taught (eg. see all figures and associated text) the invention substantially as claimed, including a portable computer unit (eg., see TITLE) comprising:

- a) a portable computer housing (see figure 1);
- b) a computer means positioned in the housing (eg., see figure 8);
- c) a keyboard mounted on the housing and interfaced to the computer means (eg., see figures 7 and 8);
- d) a computer unit closure panel (55 in figure 1) hingedly (61 in figure 1) connected to the housing and pivotal relative thereto;
- e) flat panel display means (77 in figure 7) interfaced to the computer means and mounted on a first side of the closure panel (eg., see figures 7 and 8);
- f) hinge means (61) hingedly connecting the closure panel to the housing (eg., see figure 1) and electrical connector means (83 in figure 1) interfacing the display means to the computer means (see figure 8), the hinge means and connector means cooperating in such a manner as to enable the closure panel to be positioned with the display means generally facing the keyboard (see figure 7) to facilitate use of the

Serial Number: 612956  
Art Unit : 2302

unit by operation of the keyboard and viewing the display means.

22. Paulsen did not specifically recite flipping the display means over as currently claimed. Specifically, the reference did not recite alternatively to enable positioning the closure panel in overly relation to the housing with the display means facing away from the housing to facilitate use of the unit by operation of the array and viewing the display means. Why? Because one skilled in the art would have noticed that the keyboard and the display means were faced away from each other making use of the device difficult as there was no other means to input data as like with the keyboard. However, the hinge was so constructed such that the display device could be face way from the keyboard as covered by figures 22-et seq. Clearly one skilled in the art, knowing that the display was separable from the remaining portions of the housing, could obviously had rotated the display 180 degrees, or any for that matter, such that the display no longer faced the keyboards.

23. Also the reference did not specifically detail a transparent membrane or the equivalent. However, since the display could be rotated in such a manner, inputting of data becomes some what difficult since the keyboard is no longer usable and the use of such alternative input means was clearly suggested by Smith to replace the keyboard (eg., see Abstract, col. 2 (line 24-et seq.)).

24. It would have been obvious to one skilled in the data processing art to have combined the teachings of the two

Serial Number: 612956  
Art Unit : 2302

references because they both were directed toward the problem of inputting data into a portable computer. Also one skilled in the art clearly would have noticed that when the display was rotated about as currently claimed, the keyboard became inaccessible if not virtually gone. However, Smith taught that there were alternate means for inputting data when there were no keyboards remaining (eg., see col. 1 (line 44-et seq.)).

25. Per claim 13, the primary reference clearly taught that the hinge means was separable and obviously would have been reversible to permit one to reattached a now flipped over display.

26. Per claim 14, see figure 22.

27. Per claim 15, these limitations have been directly or indirectly addressed supra.

28. Per claim 16, see figure 22.

29. Per claims 17 and 18, see figure 22. However, use of edge type connectors clearly was known in the art and since the display was flipped about, so would the cables if twists were not desired,

30. Per the other claims not thus mentioned, these limitations have been addressed directly or indirectly as shown supra.

31. The thrust of the claimed invention is a laptop computer having all the well known components including a display which could be flipped over and placed over the keyboard thus transforming the laptop into an intelligent clipboard with no keys. Clearly it was obvious to those skilled in the art to flip a display about placed over the keyboard with the display facing up. However, such would have rendered the keyboard inaccessible,

Serial Number: 612956  
Art Unit : 2302

thus membranes are the obvious solution as covered by Smith. As to the mechanical structure (eg., springs, hinges, reversible edgeconnectors and the like) such were inherent design choices to make the system mechanically sound and stable with untwisted cable links. Basically none of the art of record taught of flipping over a display. But clearly since displays were detachable and membranes present in the art, one obviously could envision a laptop which could be transformed from a keyboard type laptop to an intelligent clipboard.

32. A new oath or declaration is required because of the reasons outlined infra. The wording of an oath or declaration cannot be amended. If the wording is not correct or if all of the required affirmations have not been made or if it has not been properly subscribed to, a new oath or declaration is required. The new oath or declaration must properly identify the application of which it is to form a part, preferably by Serial Number and filing date in the body of the oath or declaration. See MPEP 602.01 and 602.02.

33. The Oath or Declaration does not state that the person making the oath or declaration in a continuation in part application filed under 35 U.S.C. 120 which discloses and claims subject matter in addition to that disclosed in the prior copending application, acknowledges the duty to disclose material information as defined in 37 C.F.R. 1.56(A) which occurred between the filing date of the prior application and the national or PCT international filing date of the continuation in part.

34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Harrell whose telephone number is (703) 308-3028. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0754.



ROBERT B. HARRELL  
EXAMINER  
ART UNIT 232